

# The AFHCAN Telehealth Program

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“Telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve patients' health status.”

“... "telehealth" .. is often used to encompass a broader definition of remote healthcare that does not always involve clinical services. “

***American Telemedicine Association***

<http://www.americantelemed.org/news/definition.html>



# Alaska: The Doctors are NOT where the Patients ARE

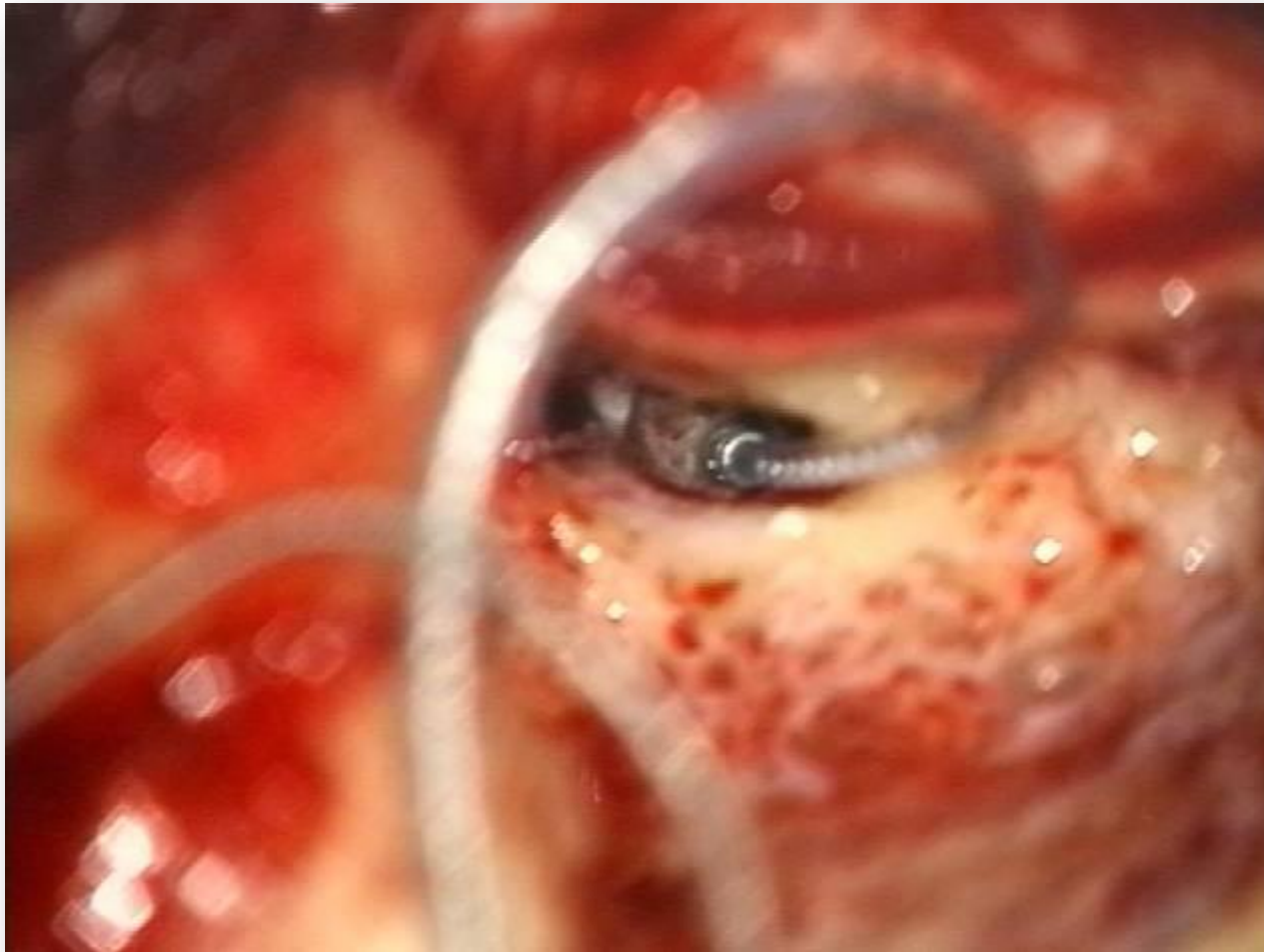
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- 59% of the state's residents are in medically underserved areas.
- Alaska is 48<sup>th</sup> in “doctors to residents” ratio
  - 65% are located in Anchorage
  - Shortages in many specialties
  - 579 Community Health Aides in 200 villages provide nearly ½ million encounters each year.
- 49% of all physicians in Alaska are primary care physicians (2002 data).
  - The U.S. average is 28%



# Post cochlear implant rehab

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# When Do You Need A Telemedicine Consultation?

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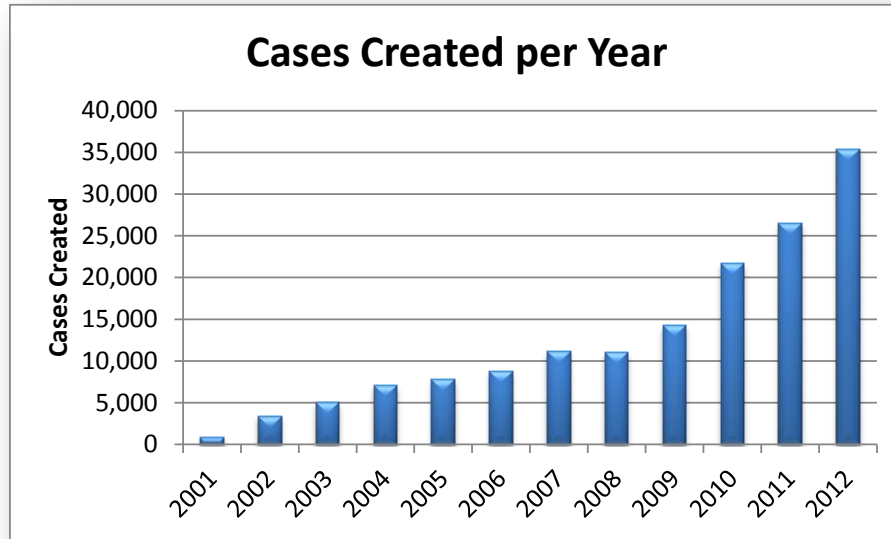
- Uncertain about the diagnosis.
- Uncertain about the treatment.
- Uncertain about the outcome; complications



**Specialist participation earlier  
rather than later.**



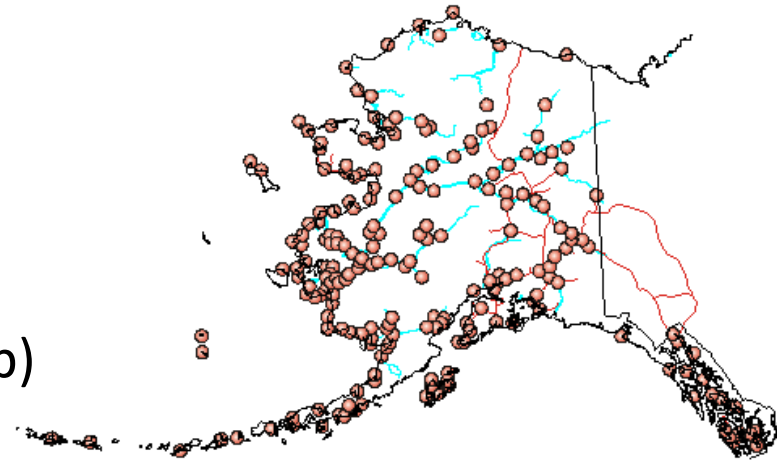
# AFHCAN Telehealth Program



- Managed by ANTHC
- Federally funded
- 28 Staff
- 12 year Operational History
  - 35,000 cases/year
  - 160,000 Cases (ATHS)

Installed Customer base includes:

- ▶ Alaska: 248 sites, 44 organizations
  - 66 operational systems in 2011
  - 1,564 providers in 2012
  - 22,353 patients in 2012 (16% of AN pop)
- ▶ Primarily Store and Forward system



# Primary and Specialty Care Cases

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**170,622** Cases created

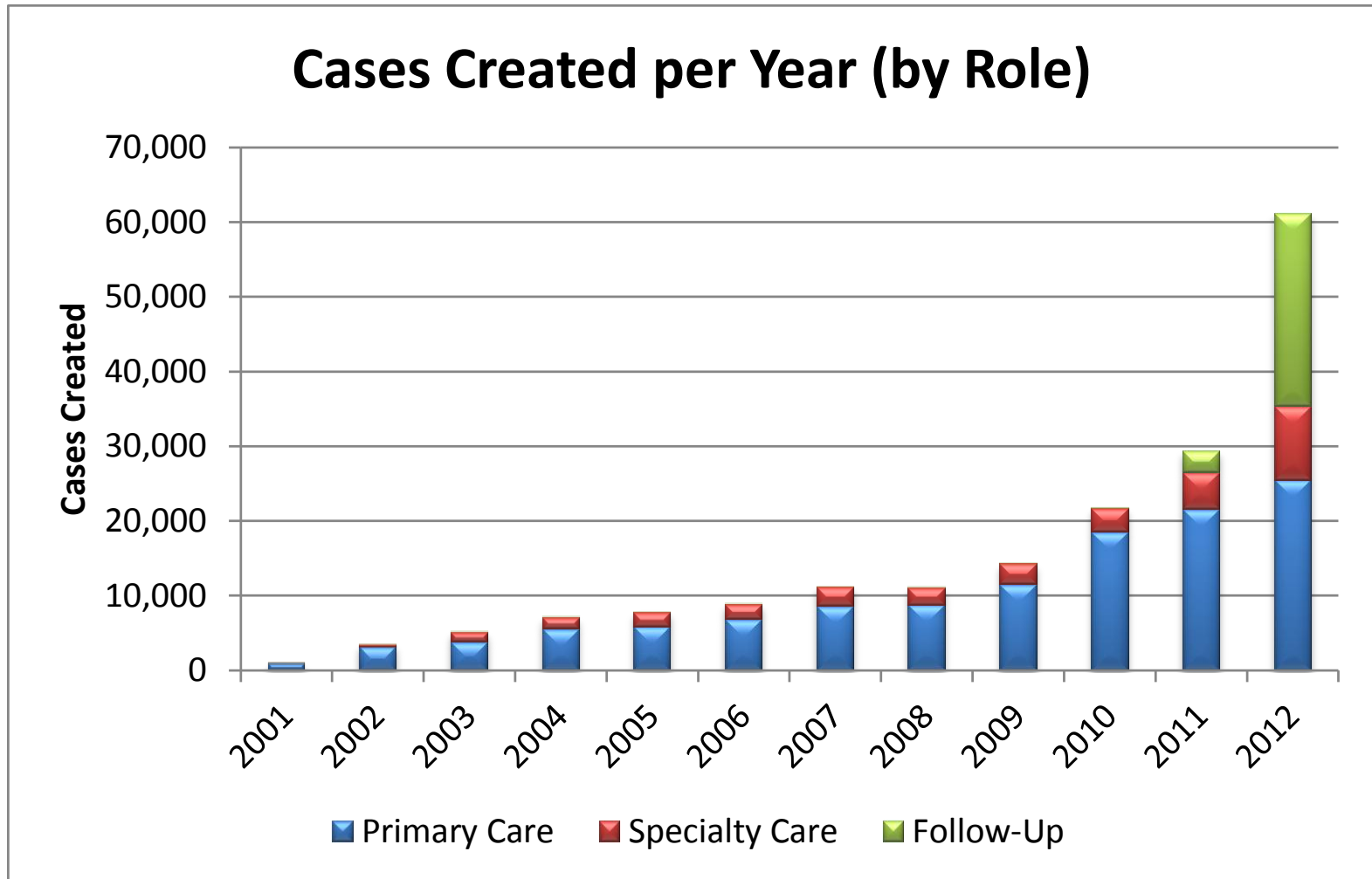
**74,405** Patients served

**3,594** Providers involved

**2,139** Providers creating



# Total Usage





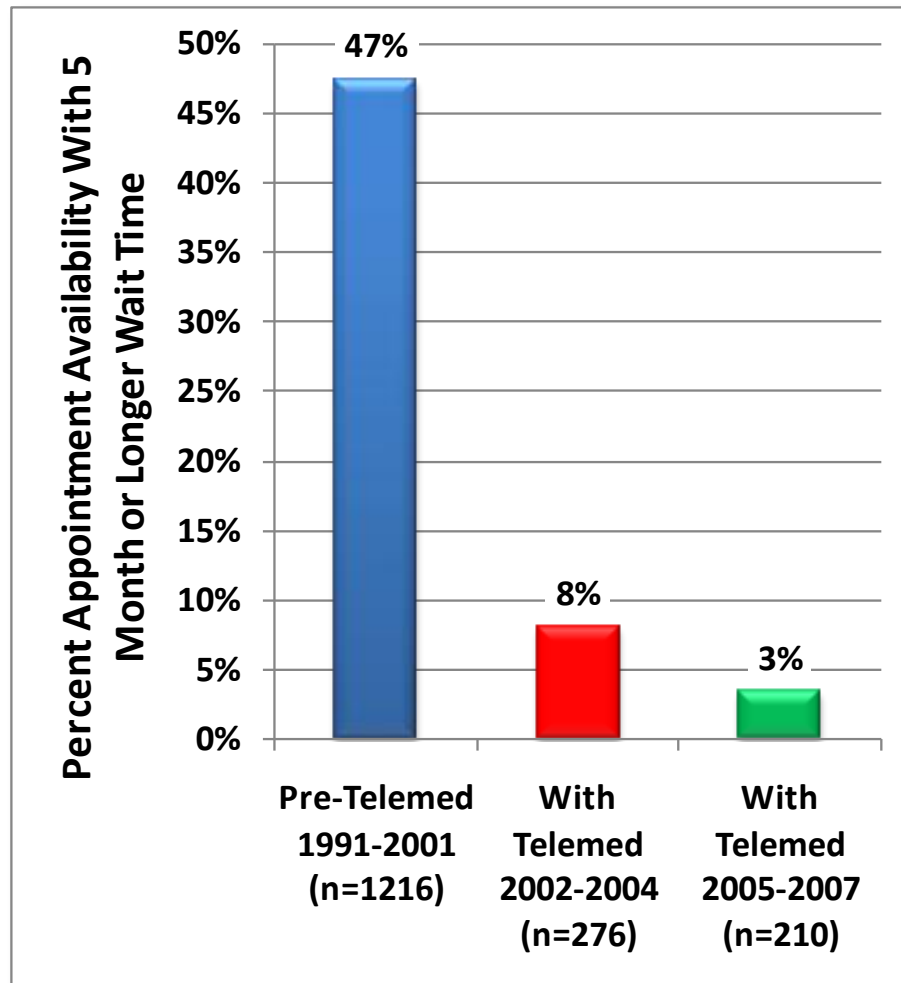
# Role of Telemedicine

- S&F
  - 3% of encounters
  - Primary Care (75%)
  - Specialty Care (25%)
  - Triage / Planning
  - Discharge Planning
  - Esoteric : Abuse ...
  - Teleradiology
  - Telepharmacy
- VtC
  - Cardiology
  - Liver/Hepatitis
  - Pediatrics
  - Breast Cancer Screening
  - Mental Health / API
- RPM

Audiology  
Cardiology  
Care Coordination  
Center  
Dental  
Dermatology  
Emergency  
Department  
Endocrinology  
Family Medicine  
Gastroenterology  
HIS  
Internal Medicine  
Neurosurgery  
Ophthalmology  
Orthopedics  
Otolaryngology  
Pediatrics-  
Outpatient  
Podiatry  
Pulmonology  
Rheumatology  
Surgery  
Urology  
Women's Health



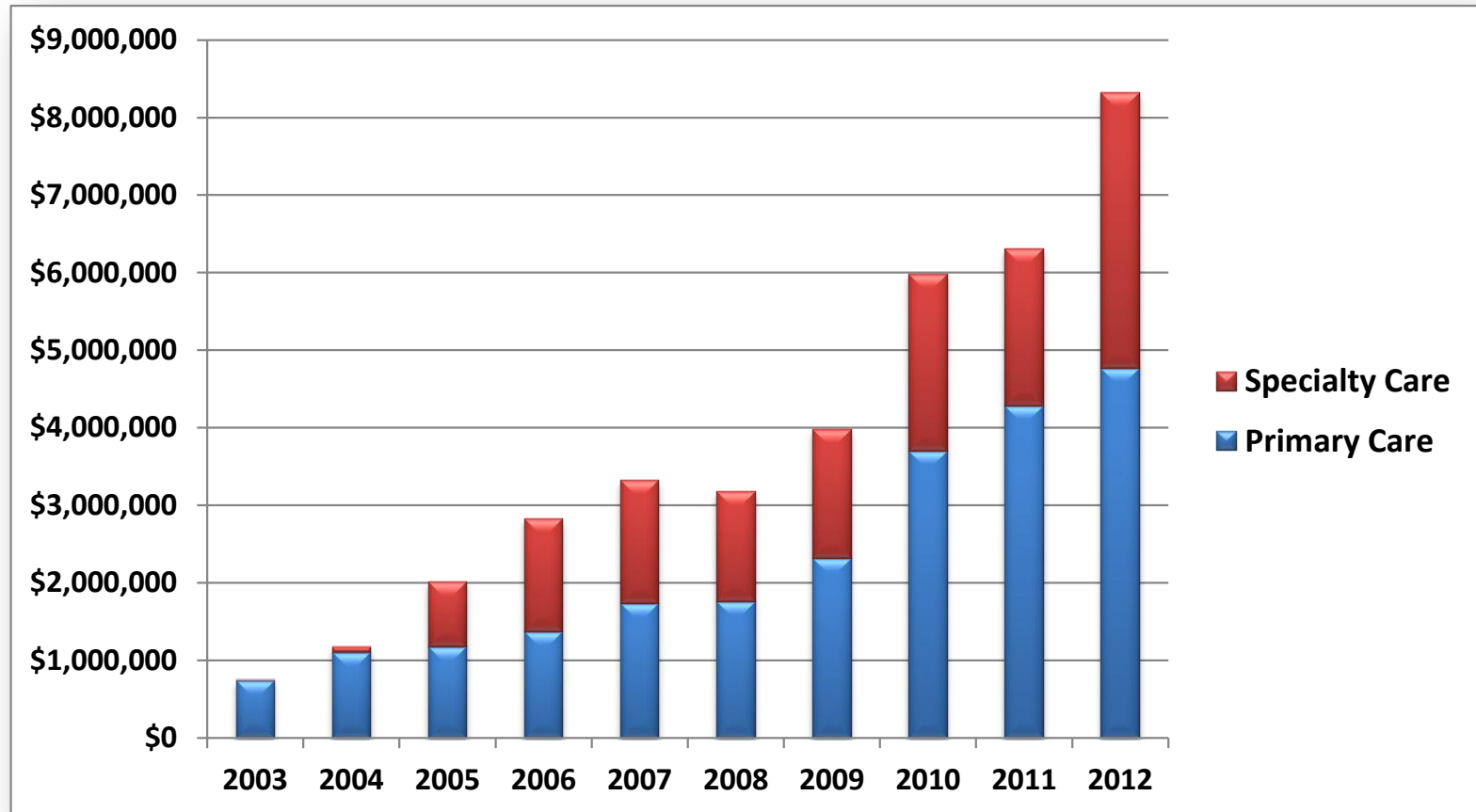
# Telehealth Impact on Extended Waiting Times (> 4 months)



*Data courtesy of Phil Hofstetter*



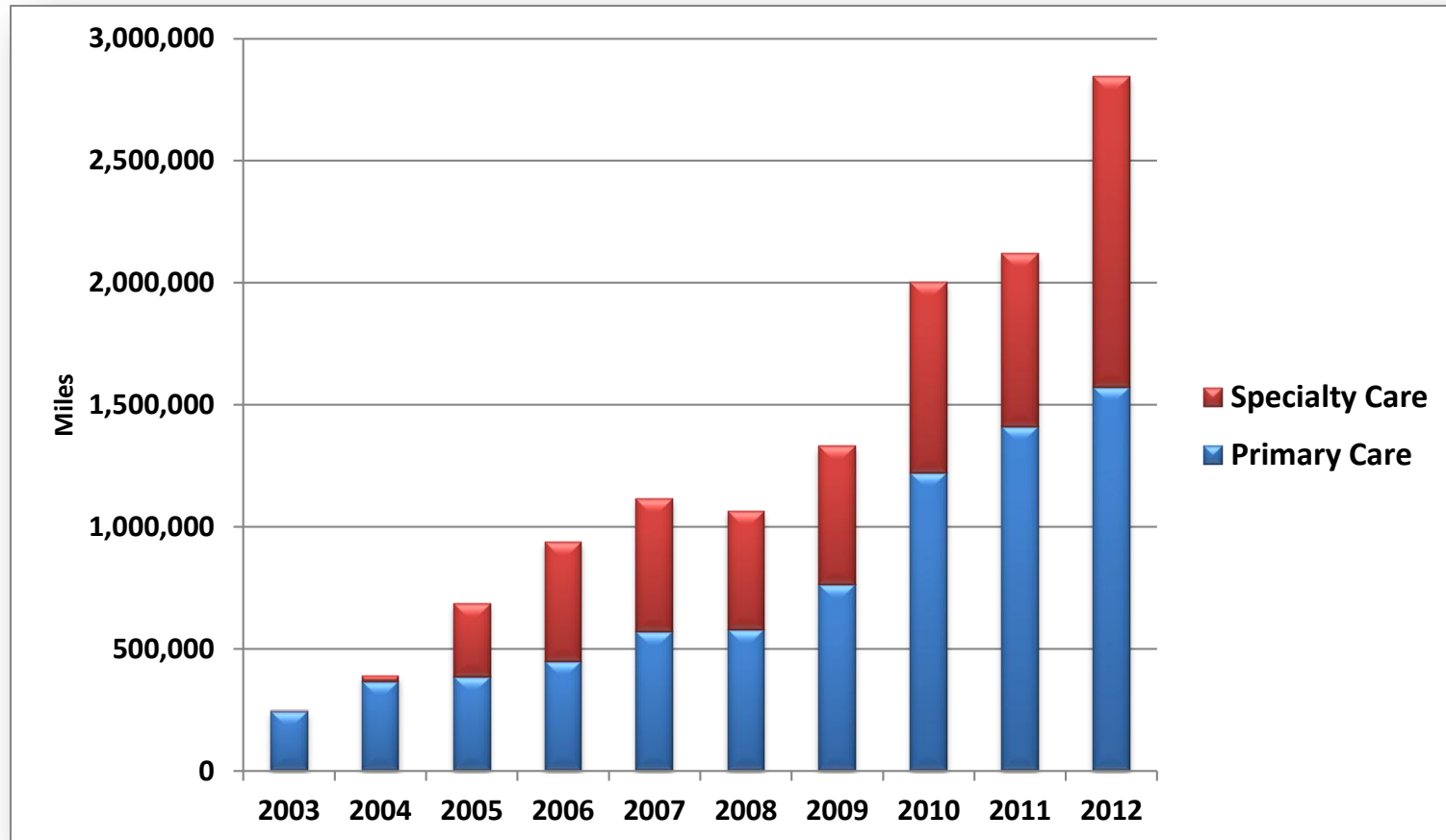
# Estimated Travel Savings from Telehealth for **ALL** Patients



Estimated annual savings from telehealth for all patients amounts to about \$8.3m with a total savings of **\$37.8m since 2003.**



# Estimated Travel Savings (**Miles**) from Telehealth for **ALL** Patients

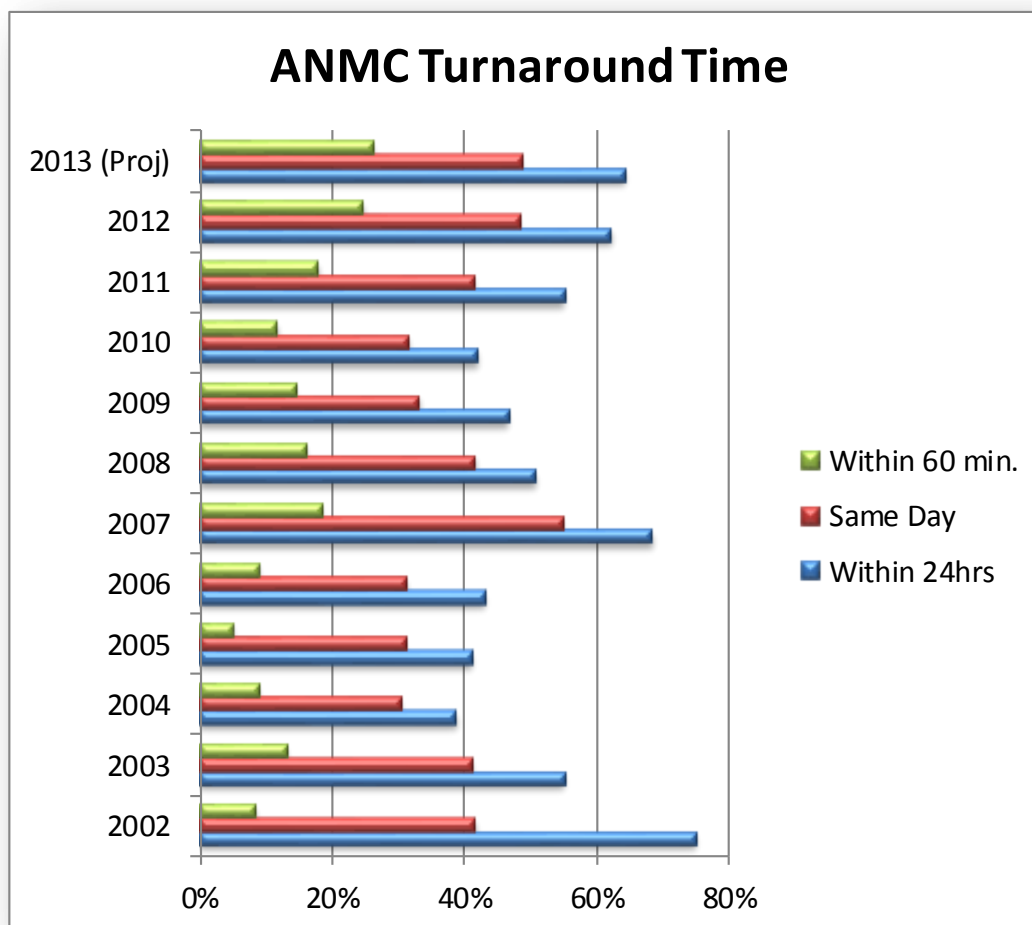


Estimated annual savings from telehealth for all patients amounts to about 2,850,000 miles, with a total savings of 12,700,000 miles since 2003.

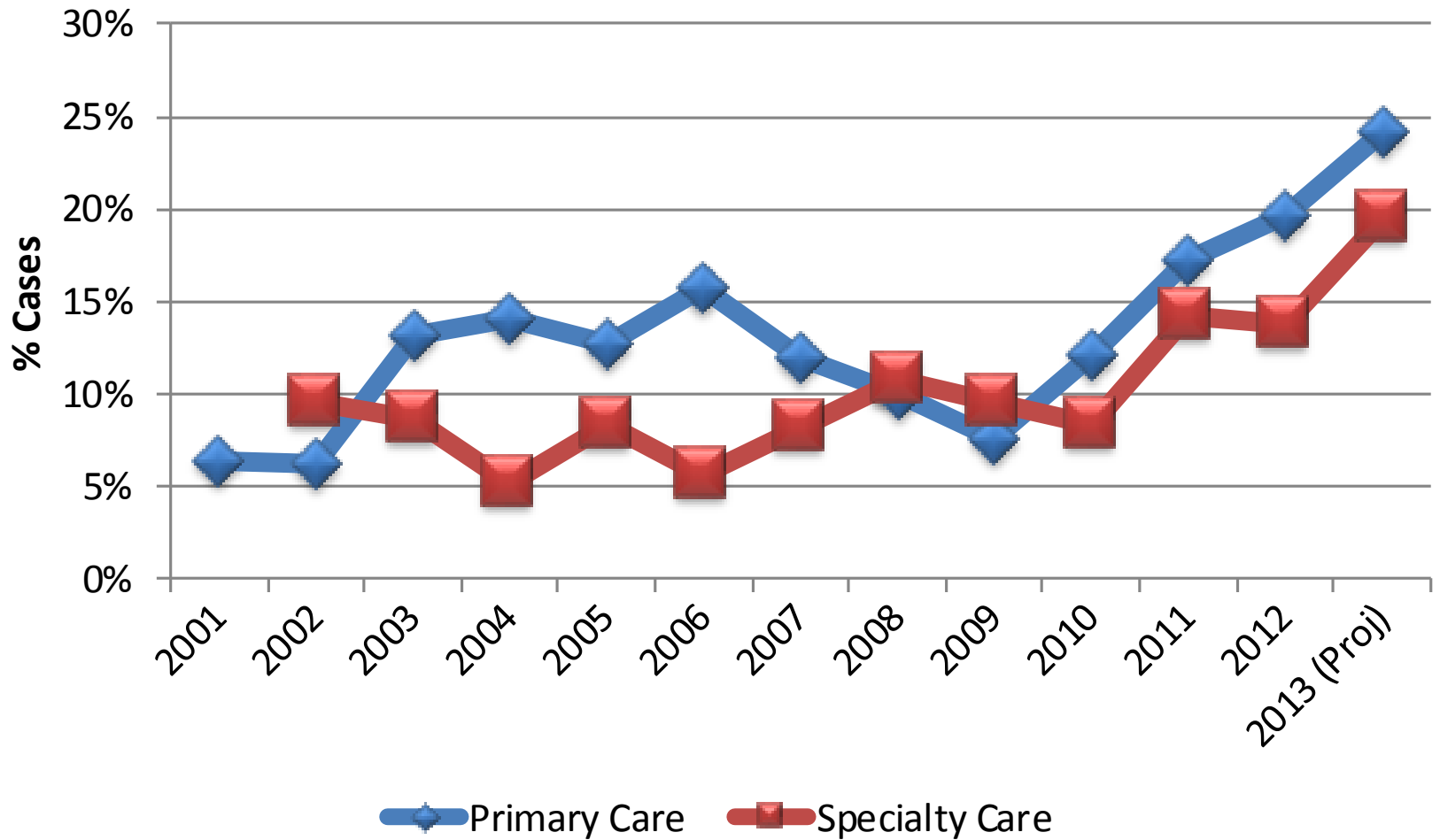


# Return on Investment

Medicaid now saves an estimated \$10 to \$11 for every \$1 spent on specialty telehealth consultations



## Travel CAUSED (by Case Role)





# NATIONAL PICTURE





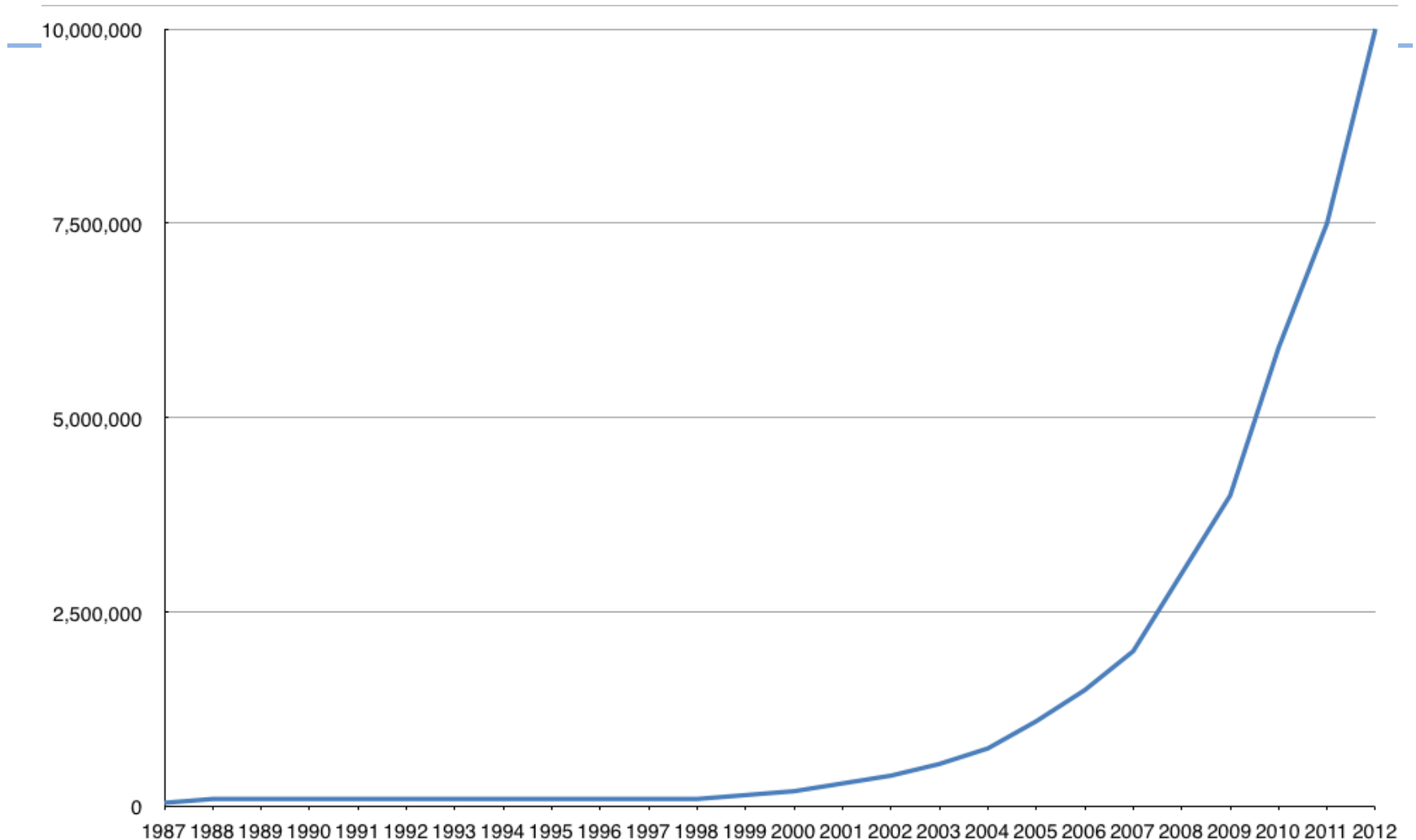
# Future considerations

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- More Medicaid patients entering the system as a result of the ACA
- Physician shortages
- Less willingness of physicians to live and work in rural areas
- No apparent reduction in travel costs on the horizon



# Patients Served by Telemedicine in North America



44 States Medicaid Programs  
reimburse for Telehealth

18 States mandate coverage  
for Telehealth



30 States introduced  
telemedicine-related  
bills this year

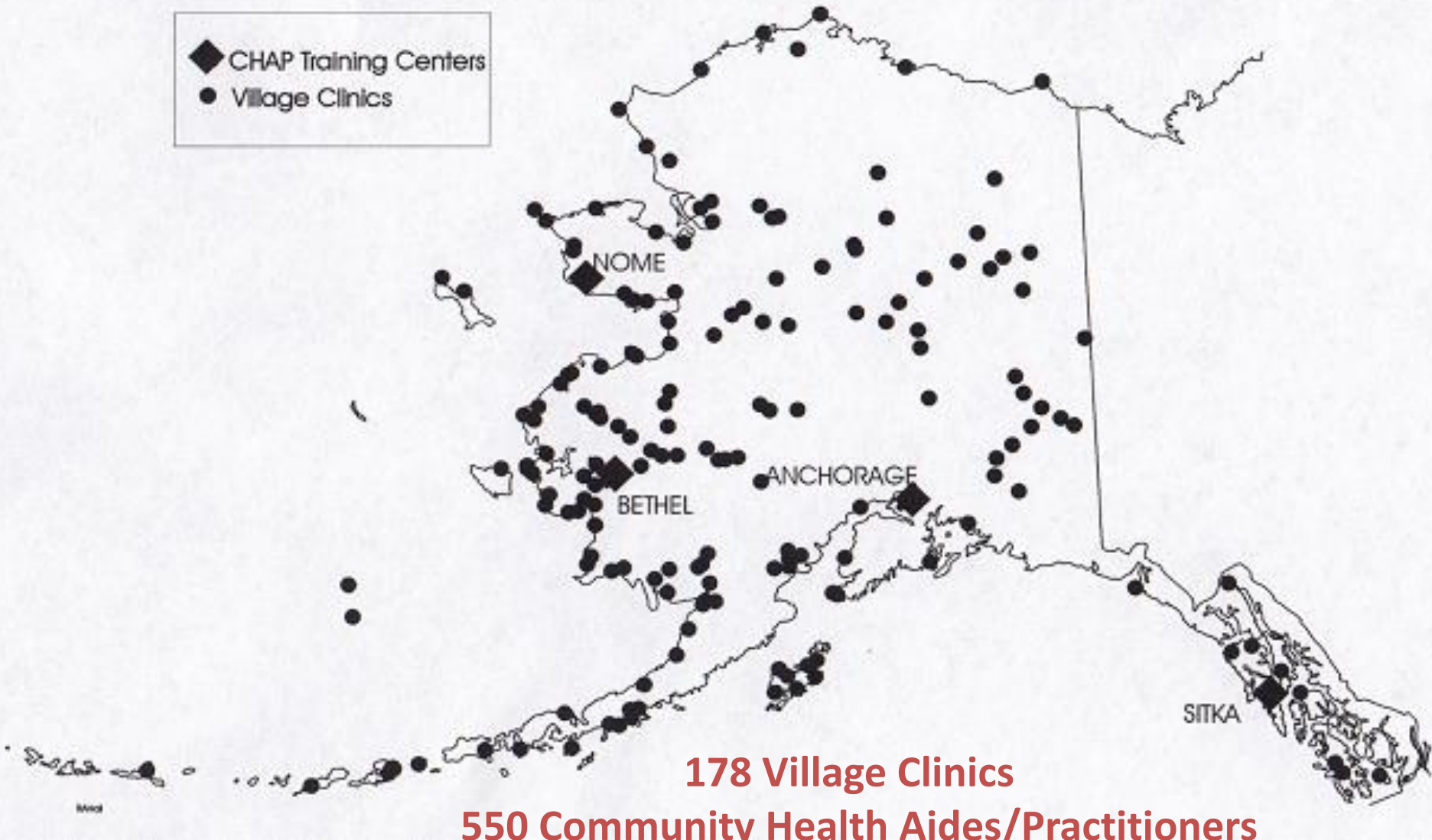
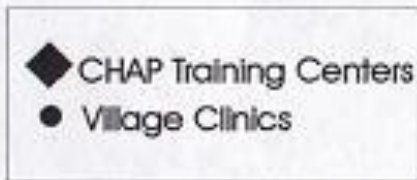




# **OTHER USES OF BROADBAND ...**



# Community Health Aide/Practitioner Village Clinics



**178 Village Clinics**

**550 Community Health Aides/Practitioners**

**270,000 Patient Encounters**

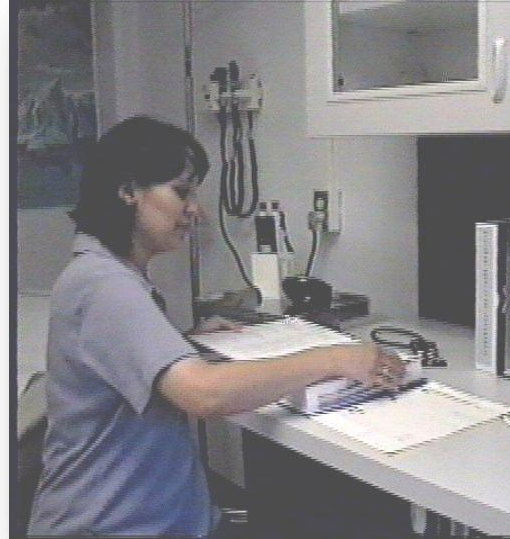


Alaska Native Tribal Health Consortium

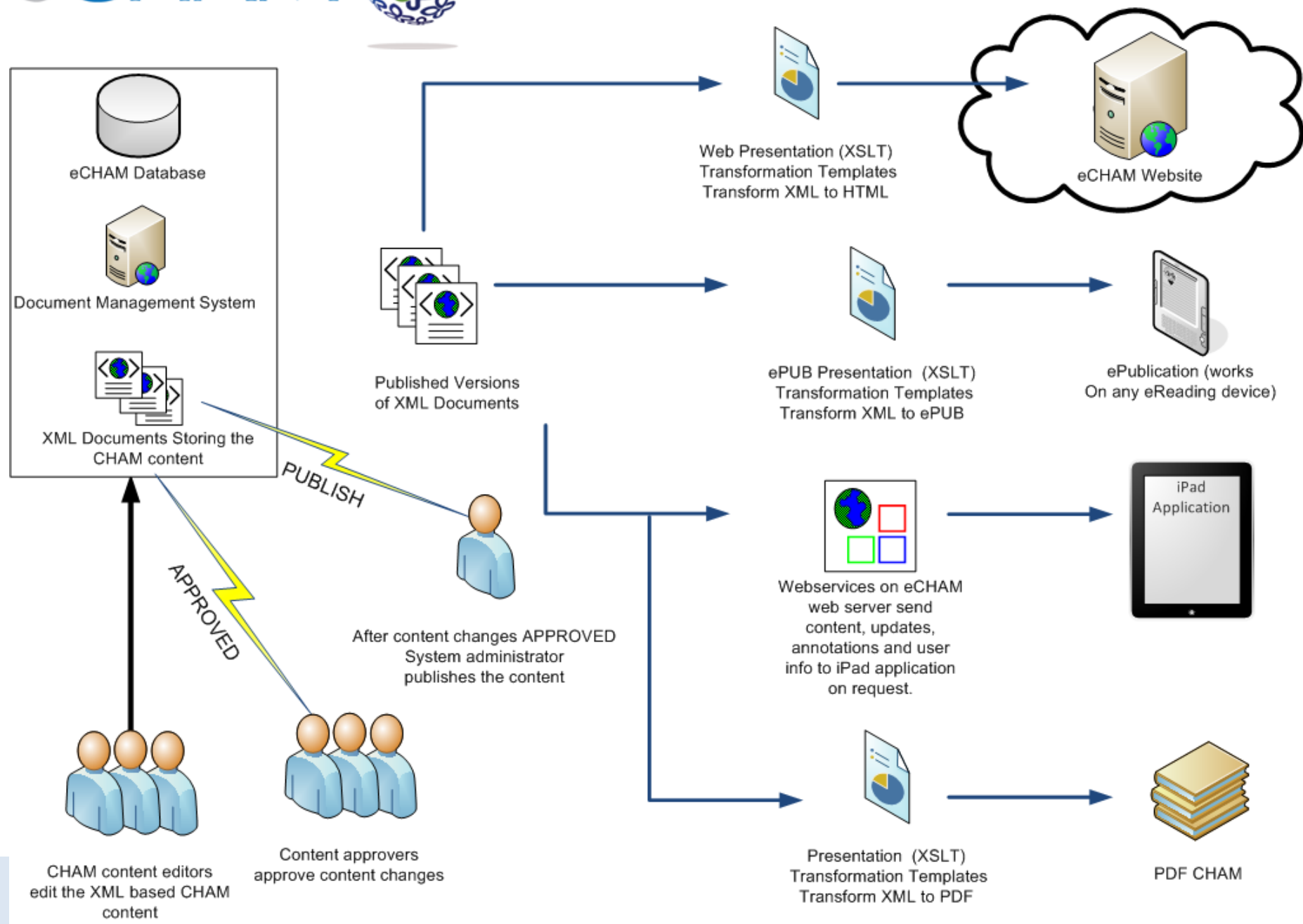


# Community Health Aide Program

The Alaska Community Health Aide/Practitioner Manual (CHAM) is used as a guideline for every patient visit and follow-up with the physician.







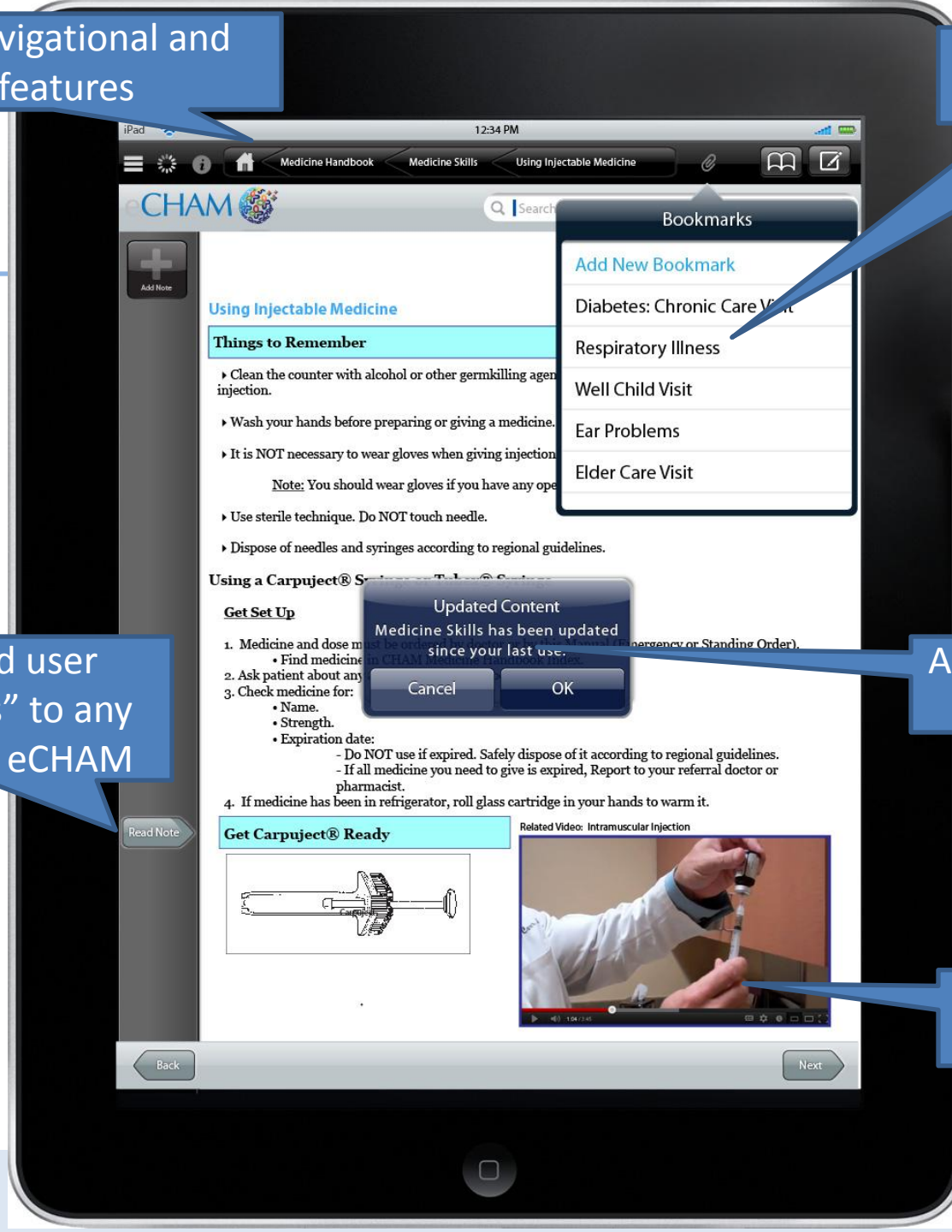
Advanced navigational and search features

Bookmarks

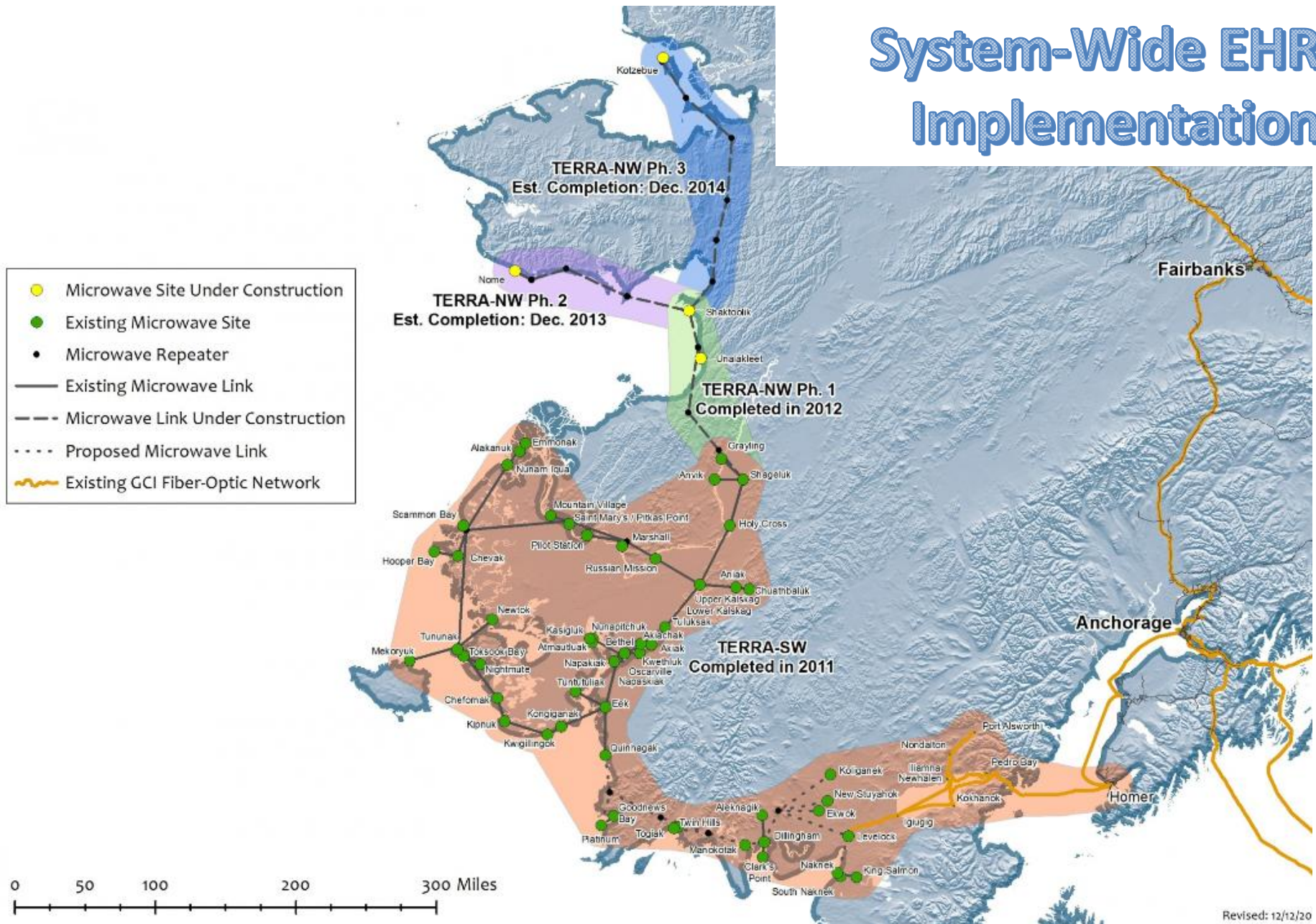
Ability to add user specific "notes" to any location in the eCHAM

Automatic updates with notification

Inclusion of Multimedia



# System-Wide EHR Implementation



Revised: 12/12/20



# Children with Complex Medical Needs

- 434 children with a NICU stay in past 3 years
- \$15m in costs POST initial hospitalization
  - \$5.8 million subsequent hospitalization costs
  - \$2.6 million in transportation
  - \$981,000 in ED day costs
  - 3483 additional hospital days
- Use Telemedicine to deliver:
  - Intensive nurse case management
  - Access to pediatric subspecialists
  - Healthy home assessments
  - Care coordination across the ATHS
- Need connectivity with excellent 3G (preferably 4G) coverage into home





# What's Possible ... Soon

- Statewide Pediatric Specialty Services
- Rapid ED response
- eICU, uPICU
- Suicide Prevention and Crisis Intervention
- Support for SART teams
- PTSD and TBI services
- Integrated Data Systems
  - EHR, HIE, Telehealth systems
- Managed Video Services
  - High Availability 7/24
  - Scheduling
  - Bandwidth Mgmt
  - Addressing
  - End Point Mgmt



# FCC Role

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- Support “Management Services”
  - E.g. Managed Videoconferencing across networks
- Support Expansion of Terrestrial Infrastructure
- Continue “Primary” program
  - S&F Telehealth, TeleRadiology, TelePharmacy, EHRs, HIE, eCHAM ... all depend on this.
  - Tribal Partners depend heavily on the current USAC subsidy program.





# THANK YOU

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